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IN THE CLAIMS:

Please substitute the following claims for the same numbered claims in the application.

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Claim 1 (Cancelled).

Claim 2 (Original): The metallurgical structure in claim 6, wherein said same material comprises copper.

Claim 3 (Currently Amended): The metallurgical structure in claim 6, wherein said first barrier layer and said second barrier layer comprise ~~comprises~~ one or more layers of Ti, TiN, Ta, and TaN.

Claim 4 (Cancelled).

Claim 5 (Cancelled).

Claim 6 (Currently Amended): A metallurgical structure comprising:

a passivation layer;

a via through said passivation layer extending to a metal line within said metallurgical structure;

a first barrier layer lining said via;

BU999175

a first metal plug in said via above said first barrier layer; wherein said metal plug and said metal line comprise a same material, and wherein said metal plug, said barrier layer and said passivation layer form a planar exterior surface of said metallurgical structure; and

a second barrier layer above said first metal plug;

a second metal plug above said second barrier layer, wherein said second metal plug, said first barrier layer, and said second barrier layer form a planar exterior surface of said integrated circuit structure;

a solder bump formed on said planar exterior surface;

wherein said solder bump is in direct contact with said metal plug;

wherein said second metal plug is in direct contact with said solder bump.

and wherein said metal plug forms sufficient intermetallics with elements diffusing from said solder bump so as to prevent said elements from penetrating through said barrier layer into said metal line.

Claim 7 (Cancelled).

Claim 8 (Cancelled).

Claim 9 (Original): The integrated circuit structure in claim 8, wherein said same material comprises copper.

BU999175

Claim 10 (Currently Amended): The integrated circuit structure in claim 8, wherein said first barrier layer and said second barrier layer comprise ~~comprises~~ one or more layers of Ti, TiN, Ta, and TaN.

Claim 11 (Cancelled).

Claim 12 (Cancelled).

Claim 13 (Currently Amended): An integrated circuit structure comprising:

internal components within an exterior covering;

a via extending through said exterior covering to said internal components;

a first barrier layer lining said via;

a first plug in said via above said first barrier layer; wherein said plug and said internal components ~~comprise a same material, and wherein said plug and said barrier layer form a planar exterior surface of said integrated circuit structure; and~~

a second barrier layer above said first plug;

a second plug above said second barrier layer, wherein said second plug, said first barrier layer, and said second barrier layer form a planar exterior surface of said integrated circuit structure, and

a connector formed on said planar exterior surface;

wherein said second plug is in direct contact with said connector, and

BU999175

~~wherein said connector is in direct contact with said plug,~~

wherein said first plug, and said second plug, and said internal components comprise a same material,

and wherein said metal plug forms sufficient intermetallics with elements diffusing from said solder bump so as to prevent said elements from penetrating through said first barrier layer and said second barrier layer into ~~said metal line~~ internal components.

Claim 14 (Cancelled).

[Claims 15-21 (Withdrawn).]

Claim 22 (Currently Amended): The integrated circuit structure of claim 13, wherein said ~~solder bump~~ connector is comprised of a lead/tin alloy.

Claim 23 (Currently Amended): A metallurgical structure, comprising:

forming a first layer of copper on a structure;

forming a first barrier layer on said first layer of copper;

forming a second layer of copper formed on said first barrier layer; and

forming a second barrier layer on said second layer of copper;

forming a third layer of copper formed on said second barrier layer; and

forming a conductive structure that includes a given species, at least some of said given species diffusing from said conductive structure, said second layer of copper having a thickness sufficient to form intermetallics with said species diffusing from said conductive structure, and to

BU999175

adhere to said conductive structure, so as to prevent said species from penetrating through said first barrier layer into said first layer of copper.

Claim 24 (Original): The structure of claim 23, wherein said conductive structure comprises a solder ball.

Claim 25 (Original): The structure of claim 24, wherein said given species comprises tin.

Claim 26 (Original): The structure of claim 24, wherein said solder ball comprises a lead/tin alloy.

Claim 27 (Currently Amended): The structure of claim 24, wherein said first barrier layer and said second barrier layer are selected from the group consisting of Ti, TiN, Ta, TaN, and combinations thereof.

Claim 28 (Currently Amended): The structure of claim 24, wherein said second third layer of copper has an upper surface that is substantially coplanar with surrounding insulative structures.

Claim 29 (New): The integrated circuit structure of claim 6, wherein said solder bump is comprised of a lead/tin alloy.

BU999175

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Claim 30 (New): The integrated circuit structure of claim 6, wherein said second metal plug forms sufficient intermetallics with elements diffusing from said solder bump so as to prevent said elements from penetrating through said first barrier layer and said second barrier layer into said metal line.

Claim 31 (New): The metallurgical structure of claim 23, further comprising planarizing said structure.